AMENDMENTS TO THE CLAIMS

Please amend claim 20 as follows:

1.   (Original)   A system comprising:

a data cartridge carrying a non-tape storage medium, wherein the data cartridge includes read/write circuitry to access the non-tape storage medium and an external electrical connector coupled to the read/write circuitry; and

a tape drive emulator having an electrical socket to receive the electrical connector of the data cartridge.

2.   (Original)   The system of claim 1, wherein the socket comprises a zero insertion force (ZIF) socket having a set of connectors that engage the electrical connections of the data cartridge.

3.   (Original)   The system of claim 2, wherein the tape drive emulator includes a sensor to sense the insertion of the data cartridge, wherein the tape drive emulator mechanically actuates the ZIF socket upon sensing the insertion of the electrical interface of the data cartridge.

4.   (Original)   The system of claim 2, wherein the socket includes a mechanical actuation mechanism operable by a data cartridge library automation system to electrically couple the data cartridge to the emulation tape drive.

5.   (Original)   The system of claim 1, wherein the tape drive emulator comprises a host interface to electrically couple the tape drive emulator to a host computing device.

6.   (Original)   The system of claim 5, wherein the host interface conforms to one of the Small Computer System Interface (SCSI), the Fiber Channel interface, the Network Data Management Protocol (NDMP), and the Enhanced Integrated Drive Electronics / AT Attachment (EIDE/ATA) interface.

7.   (Original)   The system of claim 5, wherein the tape drive emulator comprises a translation unit to translate commands between the host interface and the data cartridge interface.

8.   (Original)   The system of claim 7, wherein the translation unit receives data stream commands from the host interface and translates the data stream commands into data block commands.

9.   (Original)   The system of claim 8, wherein the translation unit comprises a data buffer for buffering the data stream commands.

10.   (Original)   The system of claim 1, wherein the non-tape storage medium comprises a disk-shaped storage medium.

11.   (Original)   The system of claim 10, wherein the data cartridge includes a self-contained disk drive housing the disk-shaped storage medium and a disk driver controller.

12.   (Original)   The system of claim 10, wherein data cartridge further comprises a disk drive controller to control access to the non-tape storage medium, wherein the controller communicates with the tape drive emulator according to one of the Small Computer System Interface (SCSI), the Fiber Channel interface, and the Enhanced Integrated Drive Electronics / AT Attachment (EIDE/ATA) interface.

13.   (Original)   The system of claim 1, wherein the socket of the tape drive emulator provides power to the controller of the data cartridge via the electrical connector of the data cartridge.

14.   (Original)   The system of claim 1, further comprising an automation unit to selectively retrieve the data cartridge from a plurality of data cartridges conforming to industry standard dimensions for magnetic tape data cartridges.

15.   (Original)   The system of claim 1, wherein the data cartridge comprises a housing conforming to industry standard dimensions for a magnetic tape drive cartridge.

16.   (Original)   The system of claim 1, wherein the tape drive emulator has a form factor of an industry standard tape drive such that the location of the socket conforms to the location of a slot within the industry standard tape drive.

17.   (Original)   The system of claim 16, wherein the tape drive emulator comprises a power connector and one or mounting holes, and further wherein the dimensions of the tape drive emulator, the location of the power connector, and the location of the mounting holes conform to the industry standard tape drive.

18.   (Original)   The system of claim 1, wherein in response to a query from a host computing device the tape drive emulator identifies itself as an industry standard tape drive.

19.   (Original)   The system of claim 1, wherein the tape drive emulator determines the capacity of the non-tape storage medium within the data cartridge and communicates the capacity to a host computing device.

20.   (Currently Amended) A data cartridge comprising:
        a housing conforming to industry standard dimensions for a magnetic tape data cartridge;
        a non-tape storage medium and read/write circuitry for accessing the non-tape storage medium, wherein the non-tape storage medium and the read/write circuitry are contained within the housing; and
        an externally available electrical connector coupled to the read/write circuitry, wherein the externally available electrical connector is adapted to engage a zero insertion force (ZIF) socket.

21.   (Original)   The data cartridge of claim 20, further comprising a controller to control access to the non-tape storage medium.

22.   (Original)   The data cartridge of claim 20, wherein the non-tape storage medium comprises a disk-shaped storage medium and the controller comprises a disk drive controller.

23.   (Original)   The data cartridge of claim 22, wherein the data cartridge includes a self-contained disk drive housing the disk-shaped storage medium and the disk driver controller.

24.   (Original)   The data cartridge of claim 20, wherein the controller receives power via the electrical connector.

25.   (Original)   The data cartridge of claim 20, wherein the non-tape storage medium comprises one of a solid-state storage medium, an optical storage medium, a magneto-optical storage medium, and a holographic storage medium.

26.   (Original)   A tape drive emulator comprising an electrical socket to receive an electrical connector of a data cartridge carrying a non-tape storage medium.

27.   (Original)   The tape drive emulator of claim 26, wherein the socket comprises a zero insertion force (ZIF) socket having a set of connectors that engage the electrical connections the data cartridge.

28.   (Original)   The tape drive emulator of claim 27, further comprising a sensor to sense the insertion of the data cartridge, wherein the tape drive emulator mechanically actuates the ZIF socket upon sensing the insertion of the electrical interface of the data cartridge.

29.   (Original)   The tape drive emulator of claim 27, wherein the socket includes a mechanical actuation mechanism operable by a data cartridge library automation system to electrically couple the data cartridge to the emulation tape drive.

30.   (Original)   The tape drive emulator of claim 26, wherein the tape drive emulator comprises a host interface to electrically couple the tape drive emulator to a host computing device.

31.   (Original)   The tape drive emulator of claim 30, wherein the tape drive emulator comprises a translation unit to translate commands between the host interface and the data cartridge interface.

32.   (Original)   The tape drive emulator of claim 26, further comprising a controller to control access to the non-tape storage medium of the data cartridge.

33.   (Original)   The tape drive emulator of claim 26, wherein the non-tape storage medium comprises a disk-shaped storage medium and the controller within the tape drive emulator comprises a disk drive controller.

34.   (Original)   The tape drive emulator of claim 26, wherein the tape drive emulator has a form factor of an industry standard tape drive such that the location of the socket conforms to the location of a slot within the industry standard tape drive.

35.   (Original)   The tape drive emulator of claim 34, wherein the tape drive emulator comprises a power connector and one or mounting holes, and further wherein the dimensions of the tape drive emulator, the location of the power connector, and the location of the mounting holes conform to the industry standard tape drive.

36.   (Original)   The tape drive emulator of claim 26, wherein in response to a query from a host computing device the tape drive emulator identifies itself as an industry standard tape drive.

37.   (Original)   The tape drive emulator of claim 26, wherein the tape drive emulator determines the capacity of the non-tape storage medium within the data cartridge and communicates the capacity to a host computing device.